XVII. MORE NOTES ON INDIAN DERMAPTERA.

By MALCOLM BURR, D.Sc., F.E.S., etc.

Since the publication of my half volume on the Dermaptera in the Fauna of British India Series, material has accumulated with considerable rapidity. This has led to the following papers on Indian Dermaptera:—

Borelli, A. (1911). Diagnosi preventive di Dermatteri nuovi della regione indiana. (Boll. Mus. Torino. No. 640, vol. xxvi, pp. 1-4, 1912).

(1912⁸). Dermapteres nouveaux ou peu connus du Museum de Paris. (Bull. Mus. Hist. Nat. Paris, vol. xviii, pp. 221-240, 1912).

Burr, M. (1911¹⁵). Contribution to our knowledge of Indian Earwigs (J. Asiat. Soc., Bengal, vol. vii, No. 11, pp. 771–800, December 1911).

(19134). Zoological Results of the Abor Expedition, 1911-12. X. Dermaptera. Rec.

Ind. Mus., viii, pp. 135-147).

(1913⁶). Indian Dermaptera collected by Dr. A. D. Imms. (J. Proc. Asiat. Soc , Bengal (N.S.), ix, No. 5, pp. 183–187, 1913).

Since the appearance of the above papers, I have received still further material, a list of which is incorporated in the following pages. For these I am indebted as follows:—

(i) to Father Astruc, S.J., for material collected at Shembaganur, and the Pulney Hills in the Madura District, Madras.

(ii) A small collection from Southern India kindly sent me by my old friend Mr. T. B. Fletcher, F.E.S., now

Imperial Entomologist at Pusa.

(iii) A small collection made at Jaunsar and in the Central Provinces, by Dr. A. D. Imms, late Forest Etomologist to the Government of India.

(iv) Various material in the Indian Museum, submitted to

me by my old friend Dr. N. Annandale.

(v) The private collection of His Excellency Lord Carmichael, Governor of Bengal, also sent me by the Indian Museum. This collection will ultimately be distributed to different museums in India, Great Britain and Australia.

The material referred to is to be assumed to be in the Indian Musuem, unless stated otherwise; specimens from Dr. Imms and

Mr. Fletcher are indicated by the respective initials (A. D. I., and T. B. F.). Dr. Imms's specimens have been returned to Dehra Dun, and Mr. Fletcher's are incorporated in my own collection, thanks to his generosity.

The numbers refer to the official numbering of the Indian

Museum.

PROTODERMAPTERA.

Family PYGIDICRANIDAE.

Subfamily DIPLATYINAE.

Genus Diplatys, Serv.

1. Diplatys gladiator, Burr.

Chota Nagpur, Purulia, Manbhum District, 10-ii-12, No. 9529/19 9: pass between Chaibassa and Chakardharpur (nymph). 2-4-iii-13, No. 9539/19.

Bengal, Calcutta, June 11, &, No. 9511/19: Calcutta in house,

Jan 12, 9, No. 9506/19, Calcutta, 1 9, 20 ii, No. 498/20. S. India, Coimbatore, on wet rock, ix-12 (P.S. coll.). Hitherto only recorded from neighbourhood of Calcutta.

2. Diplatys falcatus, Burr.

W. Himalayas, Almora, Kumaon, 6500 ft., vii-11, (or or or or) Nos. 9555/19, 9556/19 (a fragment), 9557/19, 9558/19, 9577/19, (\$), 9580/19, larva, 9574/19: Mussoorie, 7000 ft. 20-iv-05. & , (9) No. 518/20. (Brunetti). No. 519/20 has the forceps long, straight, contiguous, and not dilated.

Also two fragments (Nos. 9565/19 and 9566,19) from same

locality, probably referable here.

3. Diplatys lefroyi, Burr.

S. India, Coimbatore, 2-xii-12. & (T. B. F.).

4. Diplatys rufescens, Kirby.

W. Himalayas, Almora, Kumaon, 6500 ft., 18-vii-11, & &, 9554/19, 9562/19, 9570/19, 9576/19, 9579/19. S. India, Coimbatore, & (K. S. P.).

5. Diplatys annandalei, Burr.?

Chota Nagpur, pass between Chaibassa and Chakardharpur, 2-4-iii-13. No. 9591/19.

I think this specimen must be referred to this species. Hitherto

only known from Siam.

6. Diplatys liberatus, Burr.

S. India, Puthir, S. Canara, 29-i-13 (Y. R.), &.

7. Diplatys bormansi, Burr.?

Bombay, Satara District, Bamnoli to Akalpa, Ratnagiri District. 27-x-12. 2 9. No. S.P.A./341-342, Medha, Yenna Valley, 2300 ft., 23-iv-12. S.P.A./172, a fragment, same locality, S.P.A./175. Helvak, Kovna Valley, 2000 ft., iv-12. S.P.A./198,

a fragment.

It is possible that where sufficient material has been examined, and especially, the genital armature observed, that several species of this difficult genus will require to be fused. To dissect out the genitalia, and the ninth sternite of the male, which offers such valuable specific characters in this genus, but is often difficult to observe, specimens in alcohol are necessary. I am inclined to think that there are dimorphic forms of the males in several instances.

Subfamily PYGIDICRANINAE.

Genus Kalocrania, Zacher.

1. Kalocrania eximia, Dohrn.

Assam, Sonapur, &, No. 9586/19 (L. W. Middelton).

E. Bengal, 9, No. 9540/19 (H. Stapleton).

Upper Burma: Northern Shan Hills, σ (J. C. Brown). A defective small specimen, with the tips of the forceps broken off, No. 535/20.

2. Kalocrania picta, Guer.

Bengal, Calcutta, rains, 2 &, No. 9587/19 (Gravely).

3. Kalocrania valida, Dohrn.

S. India, Ootacamund, 20-31-xii-12 and 27-x-12, at 7500 ft. (T. B. F.), 2 9. The elytra is unusually short.

Genus Dicrana, Burr.

I. Dicrana kallipyga, Dohrn.

S. India, Ootacamund, 12-14-i-13 (T. B. F.), 4 °, 3 °, 31.
id., 7500 ft. 27-x-12. ° (T. B. F.). Shevaroys,
Hopeville Estate, 4000 ft., 16-x-12, (T. B. F.), larva. Mysore,
Bababudin Hills, xi-12, 4000-5000 ft. (T. B. F.), Maddur, 3000
ft., 23-vii-12, ? (T. B. F.).

Bombay, Satara District, Taloshi, Koyna Valley, 2000 ft., S.P.A./180, Helvak, Koyna Valley, 2000 ft., iv-12, S.P.A./197.

2. Dicrana dravidia, sp. n.

Fusco-nigra, fulvo-variegata: forcipis bracchia & basi ipso contigua, tum fortiter arcuata, apice bimucronata, attingentia.

Long. corporis .. 19 mm.

Small: greyish black, varied with tawny: antennae greyish: head smooth, black, marbled with tawny: pronotum as broad as the head, longer than broad, parallel-sided, posterior border straight, all angles rounded, black, with a median tawny band and narrow tawny edging: scutellum tawny: elytra black, with a broad, oblique broad pale tawny band: legs tawny, marbled with black: abdomen greyish and black, densely clothed with a golden pubescence: last tergite ample, smooth: ninth sternite broadly rounded, entire; forceps stout and depressed, trigonal, stout and broad at the base and subcontiguous at the base itself, arcuate to enclose a lozenge-shaped area, the points meeting and bimucronate: inner margin crenulate near the base.

S. India: Madura District: Shembaganur, I & (Father

Astruc, c.m.).

The forceps readily distinguish them from other Oriental species: in appearance it recalls the African D. frontalis and D. separata.

Family LABIDURIDAE.
Subfamily ALLOSTETHINAE.

Genus Gonolabidura, Zacher.

1. Gonolabidura minor, sp. n.

Statura minore: G. piligeri vicina: differt statura multo minore, sculptura abdominis crebriori, segmento ultimo dorsali lateribus carinatis.

Long. corporis .. 11 mm.

Small: colour red-brown: antennae greyish, basal 2 segments yellow and apical ones whitish; about 15 segments; 3rd. clyindrical, about twice as long as broad; 2nd. much shorter, obconical, the rest gradually lengthening, form pear-shaped to long ovate. Head smooth, shining, sutures faint: pronotum transverse, rectangular: meso- and metanota larvae: sternum typical: legs yellow: abdomen chocolate brown, hairy, densely but very finely punctulate: sides of 7-9th segments convex and finely rugulose: last dorsal segment ample, smooth, with a keel along each side corresponding to the lateral ridge of the forceps: penultimate ventral segment rounded: metaparameres lanceolate.

acuminate: forceps with branches subremote, trigonal, tapering, unarmed, gently arcuate.

S. India: Anamalai Hills, 4000 ft., 23-i-12. &, nymph,

(T. B. Fletcher, c.m.).

This is a diminutive relation of *G. piligera*: it differs in its much smaller size, more densely, but equally finely, punctulate abdomen, and laterally keeled last dorsal segment. I took it at first for a larva of that species, but the apical segments of the parameres are protruding: these are typically narrow and pointed. I hesitated to extract them, prefering to wait for more material, as there is no doubt as to the position of the species, and I did not wish to damage the only adult male available, which is dry.

Subfamily PSALINAE.

Genus Homoeolabis, Borelli.

1. Homoeolabis maindroni, Bor.

S. India: Coimbatore, 21-vi-12. Under a log, 9 (Y. R.). Coorg, on coffee estate, 3400 ft., 4-iv-12, Bangalore.

Genus Euborellia, Burr.

1. Euborellia stali, Dohrn.

S. India, Bangalore, under flower pots, 3300 ft., 28-i-12, many specimens; Coimbatore, many specimens: id., at light. 30-ix-12 (T. B. F.): id., 22-v-12 (Y. R), σ .

Bombay (town), Elphinstone College Compound, 4-viii-11,

under stone, No. 1545/19.

2. Euborellia penicillata, Bor.

S. India, Ootacamund, 12-14-i-13: many specimens. (T. B. F.). id., 27-x-12. 2500 ft. &. (T. B. F.).

3. Euborellia moesta, Gene, vel species vicina.

Bombay, Satara District, Mahableshwar; 4200 ft., 13-16-iv 12. S.P.A. 161, 167, 168. ♂♂: S.P.A./166, 169 larvae.

4. Euborellia, sp.

E. Himalayas, La-ai River, Kalem Valley, Mishmi Country. 31-x-12. 9. No. 7701/19.

.5. Euborellia greeni, Burr

Mysore: Bababudin Hills, 4500-5000 ft.

Madras: Shevaroy Hills, Hopeville Estate, 4000 ft., 16-x-12. 2 σ : Vallakadai Peak, 4500 ft., 18-x-12. Kadiar Rocks, 4000 ft., 15-x-12. Yercaud, 4500 ft., 20-x-12.

All the above specimens were taken by Mr. T. Bainbrigge Fletcher in October, at an elevation between 4000 and 5000 ft. under logs and in dead leaves.

It somewhat resembles E. penicillata, but it is a little bigger, more clumsily built, and lacks the tuft of hairs in the ninth sternite of the male: the colour is much less rich, and the sculpture of the head much more marked.

These South Indian specimens differ from the original Singalese examples, taken by Mr. Green, in more dull-coloured legs. which do not contrast so strikingly with the black body.

The species is already known from Southern India, as there is one from the Nilgiris in the British Museum.

Travancore:—Top Station, 6000 ft. (Andrews).

This is a very small pair, the male being only 10 mm. long: the forceps are decidedly arcuate apicad, but it agrees in other respects with the specimens from the Shevaroys.

6. Euborellia sisera, sp. n.

Caput rufum, occiput profunde excavernato: pronotum rufum, subquadratum: elytra ad suturam attingentia, scutello



brevi et lato: pedes fulvi: abdomen & segmentis lateribus 6-9 carinulatis, acuminatis ac rugulosis: segmentum penultimum ventrale & rotundatum: forcipis bracchia & subremota, triquetre, irregularita arcuata et asymmetrica.

> Long. corporis ... 18'20 mm. ,, forcipis

Antennae red-brown with 18 segments, the 3 basal segments yellow and some paler before the apex, 3rd, cylindrical and elongate; 4th, half; the 5th, nearly as long as 3rd; all subcylindrical. Head deep red or reddish black, smooth and tumid, the suture faint: the middle of the occipital region occupied, from the base of the head to the transverse suture, by a deep, regular, longitudinal cavity. Pronotum subrectangular, slightly concealed by the rudimentary elytra, which meet for the greater part of the sutural length, exposing only a very short scutellum, which is almost as broad as the mesonotum. Metanotum larval. Prosternum elongate and parallel-sided constricted before the base: mesonotum rounded and metanotum truncate posteriorly: all sternum yellow. Legs orange yellow; tarsi long, the first and third segments about equal, the second minute. Abdomen black, very

finely punctulate: sides of 6-9th segments in the σ acuminate, finely keeled and rugulose. Last dorsal segment σ ample, smooth, transverse, with a median sulculus, truncate posteriorly, with a rugulose keel down each side: penultimate ventral segment σ rounded. Forceps with the branches σ not contiguous, trigonal and tapering, rather elongate and irregularly arcuate, asymmetrical.

S. India, Anamalai Hills, 4000-4200 ft., 22-23-i-12, under

dead logs., 20 (T. B. Fletcher: type in c.m.).

I am indebted to Mr. T. Bainbrigge Fletcher for this peculiar species: it is chiefly remarkable for the curious cavity in the top of the head: at first I took this to be a pathological feature, but it is identical in both the male specimens available: under the lens it has every appearance of being structural. It would be most interesting to investigate its functions: possibly it is a scent-gland.

In all other respects it appears to be a typical *Euborellia*: the structure of the elytra is as in *E. greeni*, but the forceps are quite distinctive. It most nearly approaches the large black variety of *E. greeni* recorded by me from Ceylon, which is very probably a

good species.

Genus Anisolabis, Fieber.

1. Anisolabis annulipes, Luc.

Simla Hills, Dharampur, 5100 ft., 15-v-13, & (Phaku Ram). Darjiling District, Singla, 1500 ft.: No. C.C. 373 (Lord Carmichael's collection).

Satara District, Medha, Yenna Valley, 2300 ft., 24-x-12: 9

with young. S.P.A./174 and 384.

Coimbatore, 2 on a mass of eggs under a stone in house. 23-vi-12 (Y. R.).

Possibly some of these are analytrate varieties of E. ståli.

2. Anisolabis maritima, Bon.?

Nilgiris, Coonoor, xi-12; 9 No. 9592/19.

3. Anisolabis? sp. 11.

Satara District, Mahableshwar, 4200 ft., 13-16-iv-12 (σ , $^{\circ}$ and nymph). S.P.A./162-4.

Genus Psalis, Serv.

1. Psalis dohrni, Kirby.

Elphinstone College Compound, Bombay, 4-viii-11. Under stones. No. 1545/19 & 2. Vela, Koyna Valley, 2100 ft. (&). S.P.A.'181.

2. Psalis lefroyi, Burr.?

Bangalore, 17-vii-12. 9 (T. B. F.).

3. Psalis femoralis, Dohrn.

Upper Burma, Northern Shan Hills, &: No. 534/20.

Subfamily LABIDURINAE.

Genus Nala, Zacher.

I. Nala lividipes, Duf.

Purulia, Manbhum District, Chota Nagpur, 10-ii-12; 2 9. Nos. 9527 - 8/19, $\sigma 9530/19$, 9538/19, $\sigma 9537/19$, 9536/19.

Collectorganj, Cawnpore District, U.P. (o o, 9) 9541-3/19. Anwarganj, Cawnpore District, U.P.; σ 9544/19; between Amausi and Harauni, near Lucknow, U.P., Q Q 9549-51/19.

Hamirpur Road, U.P. 16-17-x-11. 9. 9553/19. Satara District, Moleshwar, 3200 ft., iv-12. 9. S.P.A./202.

Calcutta, rains. 7787/20. & (Gravely).

Calcutta; in Museum cabinets. J. No. 497/20.

Kurseong, 13-16-vii-07. ♀. No. 507/20.

Darjiling District, Singla, 1500 ft.; C.C./373 (Lord Carmichael's coll.).

Coimbatore, at light, many specimens: (Y. R. and T. B. F.). Mysore, at light. 14-xi-12. (T. B. F.).

Bellary at Yemmganur. 20-24-xii-12: & (Y. R.).

2. Nala nepalensis, Burr.

Darjiling District, Singla; 3 &, 3 &, 3 larvae. C.C./372. (Lord Carmichael's collection).

Dharampur, 5100 ft., 15-v-13 (o) No. 528/20 (Phaku Ram).

Genus Labidura, Leach.

I. Labidura riparia, Pallas.

Simla Hills, Matiana, 8000 ft., larva; 532/20.

Satara District, Kudali Valley, Kudal, 2300 ft., iv-13; S.P.A. 392-4.

Balighai near Puri, Orissa, 16-20-viii-11 () 9588/19.

Japog Reservoir, 6-i-o8, Jodhpur, Rajputana; 9595/19, larva. Bellary at Yemmganur, 18-24-xii 12; $\sigma \circ (Y. R.)$.

Between Amausi and Harauni, near Lucknow, U.P. (o o) and 9; 9546-8/19.

Kanauj, U P. 18-xii, larva, 9552/19.

The following specimens of a small, dark red form:-Limbadia to Sason, Kathiawar, 5 xi-12 (9) S.P.A./324: Sasan, Kathiawar $(\sigma \circ S)$ S.P.A./325-6; also $\circ \circ S$ and $\circ \circ S$ and $\circ \circ \circ S$.P.A./333-5.

Labidura riparia Pallas var. inermis, Br.

Sasan, Kathiawar, 9 S.P.A./336.

Beyt, Dwarka, Kathiawar, 15-x-12. o. S.P.A./337.

Medha, Satara District, 25-x-12. Q. S.P.A./338.

Khed, Ratnagiri District, 31-xi-12 (larvae). S.P.A./339-40. Purulia, Manbhum District, Chota Nagpur, 10-ii-12. Nos. 9513-9517/19, 9519-9524/19, 9531-2/19.

Calcutta, ♀, ♂. Nos. 405-6/20.

2. Labidura bengalensis, Dohrn.

Purulia, Manbhum District, Chota Nagpur, 10-ii-12 (3, 3 ?) 9515-6/19, 9518/19, 9525/19.

Genus Forcipula, Bol.

1. Forcipula trispinosa, Dohrn.

Purulia, Manbhum District, Chota Nagpur, 10-ii-12 (9) 9514/19.

Sasan, Kathiawar, 5-xii-12 (?) S.P.A./328. id., o, of race minor, S.P.A /329.

Simla Hills, Dharampur, 6-8-v-07 (8) (N. A.) 520-1/20, 522-4/20.

id., 5100 ft., 1-v-13 (♂, ♀) (Phaku Ram) 525-7/20.

Satara District, Kudali Valley, Kudal, 2300 ft., iv-13. 9. S.P.A./395-6.

Darjiling District. 1-3000 ft., vi-12 (or 9) C.C. 376 7.

Calcutta, Museum Compound, 25-ii-13. 9593/19.

Kotwan, Mirzapore District, U.P., 29-xii-12, "below rocks in bed of stream." 2 9. No. 9594/19.

Base of hills, Chakardharpur, Singbhoom District, Chota Nagpur, 1~4-iii-13 (race minor σ) 9500/19.

2. Forcipula pugnax, Kirby.

Darjiling District, 1-3000 ft. v-vi-12. 30, 99. C.C. 371.

Sasan, Kathiawar, 5-xii-12. S P.A./327.

Darjiling District, Singla, 1500 ft. C.C./372 (two brachypterous 9 9, probably referable here).

3. Forcipula quadrispinosa, Dohrn.

Medha, Yenna Valley, Satara District. 2300 ft., 13-iv-12 (&) S.P.A./170.

Kumbarli, Vashishti Valley, Ratnagiri District. 300 ft. 9.

S.P.A./203.

Sasan, Kathiawar. 5-xii-12. σ , 9 9. S.P.A./330-2.

I consider that the number of abdominal spines, armature and curvature of the forceps are untrustworthy as specific characters,

and if we rely entirely upon one, say the spines, we shall find various types of forceps, and *vice versa*. Probably the three species should be fused into one.

Subfamily PARISOLABINAE.

Genus Pseudisolabis, Burr.

1. Pseudisolabis burri, Bor.

Simla Hills, Matiana, 8000 ft. (?) 531/20. Hitherto only recorded from Kashmir.

Family APACHYIDAE.

Genus Apachyus, Serv.

1. Apachyus feae, Borm.

E. Himalayas, La-ai River, Kalem Valley, Mishmi Country, 31-x-12. No. 7700/19. Larva.

EUDERMAPTERA.

Family LABIIDAE.

Subfamily SPONGIPHORINAE.

Genus Irdex, Burr.

I. Irdex nitidipennis, Borm.

Anamalais, 5500 ft., 21-i-12. (T. B. F.). Mysore, Bababudin, xi-12. 4500-5000 ft. (T. B. F.).

Genus Spongovostox, Burr.

1. Spongovostox semiflavus, Borm.

Nilgiri Hills, Karkur Gât, 1500 ft. v-11 (Andrews), σ . 9582/19.

Subfamily LABIINAE.

Genus Labia, Leach.

1. Labia curvicauda, Motsch.

Tamarasseri, Travancore, 19-i-13. On a coconut palm (Y. R. coll.).

2. Labia pilicornis, Motsch.

Calcutta, 9, 499/20 (or minor, L.?).

Genus Prolabia, Burr.

1. Prolabia arachidis, Yers.

Trivandrum, "in bed mats, associated with Cimex". 9596/19 Bombay, Girgaon, "in bamboo basket". 1542/19.

This species seems to have a preference for artificial conditions, whence the facility with which it has become cosmopolitan.

Genus Chaetospania, Karsch.

I. Chaetospania thoracica, Dohrn.

Tamarasseri, Travancore, 19-i-13. On a coconut palm. (Y. R.).

Family CHELISOCHIDAE.

Genus Chelisoches, Scudd.

1. Chelisoches morio, Fabr.

Tamarasseri, Malabar, 19-ii-13. "On a coconut palm." (Y. R.)

Puthir, "in toddy", 25-i-13. 9. (Y.R.).

Genus Proreus, Burr.

1. Proreus simulans, Stål.

Balighai, near Puri, Orissa. 16-20-viii-11 (\$\angle\$) 7788/20. Calcutta, Eden Gardens, at light. 17-x-11. 3 \$\sigma\$, 5 \$\angle\$. Nos. 9501-5/19, 9507/19, 9509-10/19.

2. Proreus melanocephalus, Dohrn.

Calcutta, Eden Gardens, at light, 31-x-12 (σ) 9508/19. Calcutta, in house. 9-vi-12 (σ) 9512/19.

3. Proreus cunctator, Burr.

Darjiling District, Singla, 1500 ft. (\$\sigma\$) C.C./373. Recorded from the Assam-Bhutan frontier.

Genus Lamprophorus, Burr.

1. Lamprophorus kervillei, Burr.

Darjiling District, Singla, 1500 ft. C.C./373. 9. Hitherto recorded only from Java and North-East Assam.

Family FORFICULIDAE.

Subfamily ANECHURINAE.

Genus Anechura, Scudd.

I. Anechura zubovskii, Sem.

Simla Hills, Theog, 800 ft., 27-iv-07 (♀) 533/20.

Genus Allodahlia, Verh.

I. Allodahlia scabriuscula, Serv.

Pussumbing, Darjiling, 4700 ft., xii-06: Dr. H. H. Mann (99) 504 5/20.

2. Allodahlia ahrimanes, Burr.

Pussumbing, Darjiling, 4700 ft., xii-o6: Dr. H. H. Mann (σ) 506/20.

Subfamily FORFICULINAE.

Genus Hypurgus, Burr.

I. Hypurgus fulvus, Burr.

Upper Burma, Northern Shan Hills (♂) 536/20.

Genus Elaunon, Burr.

I. Elaunon bipartitus, Kirby.

Coimbatore, 30-ix-12, at light: macrolabious σ . (T. B. F.). Shevaroys, Kadiar Rocks, 4600 ft., 15-x 12 (T. B. F.). Bangalore, 3000 ft. 1-xii-12. Macrolabious σ . (Anstead). Kumaon, Almora, 6500 ft. 18-vii-11. Macrolabious σ σ , 9560-1/19, 9568/19, 9571-2/19.

id., \$\operate \text{\$\tilde{9}\$ \quad \text{\$\tilde{9}\$ \quad \$\tilde{9}\$ \quad

Genus Forficula, L.

1. Forficula beelzebub, Burr.

Darjiling, 7000 ft., 17-ix-05 (\sigma) 508/20: Brunetti.

W. Himalayas, Mussoorie. 7000 ft. 20-vi-05 (σσ, γ) 515-6-7/20 (Brunetti).

Darjiling District, Senchal, 8000 ft., v-03 (%, 99) C.C./375. Lord Carmichael's coll.

Darjiling District, 1-3000 ft., vi-12 () C.C./378.

2. Forficula ornata, Borm.

Chutri Gouri, Nepal Terai, 27-iv-07 () 509/20.

3. Forficula greeni, Burr.

Calcutta, at light, 9-x-12 (\cdot) 9535/19

4. Forficula? sp.

N. Bengal, Siliguri, 18-20-vii-08— 9 only. 500/20, 502/20,

503/20.

Body except abdomen absolutely smooth, with a rich, glistening green metallic oily lustre: general colour black: abdomen deep chestnut to black, and finely punctulate: last tergite weakly crested at the exterior angles: branches of forceps depressed, straight, stout, and tapering.

The rich, smooth, brilliant, lustre of the head, pronotum elytra and wings render this a very distinctive species, but I refrain from naming it, as without the male it is impossible definitely

to decide its exact generic position.

5. Forficula? sp.

Nymph only. Lucknow. 510–513/20.

do. Bijnor District, Rampore Chaka, U.P., 514/20.

6. Forficula? sp.

Darjiling District, Senchal. 8000 ft. v-13. 9 only. (Lord Carmichael's collection). C.C./375.

7. Forficula gravelyi, sp. n.

Fusco-castanea: pronotum pentagonale: forcipis bracchia σ per duas partes diplanata ac dilatata, hac parte rectangulo terminata.

Long. corporis .. 10.5 mm.

Build moderately strong: general colour deep chestnut, abdo men black: antennae rather thick, black: fourth segment nearly as long as the third: head rather depressed, smooth, sutures faint: pronotum smooth, pentagonal, convex posteriorly: elytra deep brown, smooth, broad, not very long, truncate: wings protruding slightly, dark brown. Legs brown: abdomen jet black, pliciform tubercles very distinct, dorsal surface finely and densely punctulate: last tergite rectangular, transverse, punctate, not crested: pygidium minute, obtuse. Forceps with the branches robust, strongly depressed and dilated through two-thirds their length, this part ending with a right angle, but no tooth: tip gently arcuate.

Poona: Khed District, among rubbish in house: No. 1544/19. This species very closely resembles the African F. rodziankoi, Sem., differing from the dark macropterous forms of that variable species almost solely in the shape of the pronotum, which is almost pentagonal, being obtusely rounded posteriorly with straight and parallel sides.

Subfamily OPISTHOCOSMIINAE.

Genus Eparchus, Burr.

I. Eparchus insignis, Haan.

Mysore, Bababudin Hills, 4500-5000 ft., xi-12 (T. B. F.). Yercaud. "Under log; when exposed, & moved eggs in mouth." &, 9:20-x-12,4500 ft., and in dead leaves.

Fairlands Estate, 3500 ft. Sidapur, Coorg. "Under log: 9 with eggs." 17-xi-12. (T. B. F.).

Shevaroys, Hopeville Estate, 4000 ft., 16-x-12 (0, 9) (T. B. F.).

Darjiling District, Singla, 1500 ft. C.C./374. 9 and larva.

Genus Timomenus, Burr.

1. Timomenus lugens, Borm.

Darjiling District, Singla, 1500 ft. o. C.C./373.